

FIG. 1

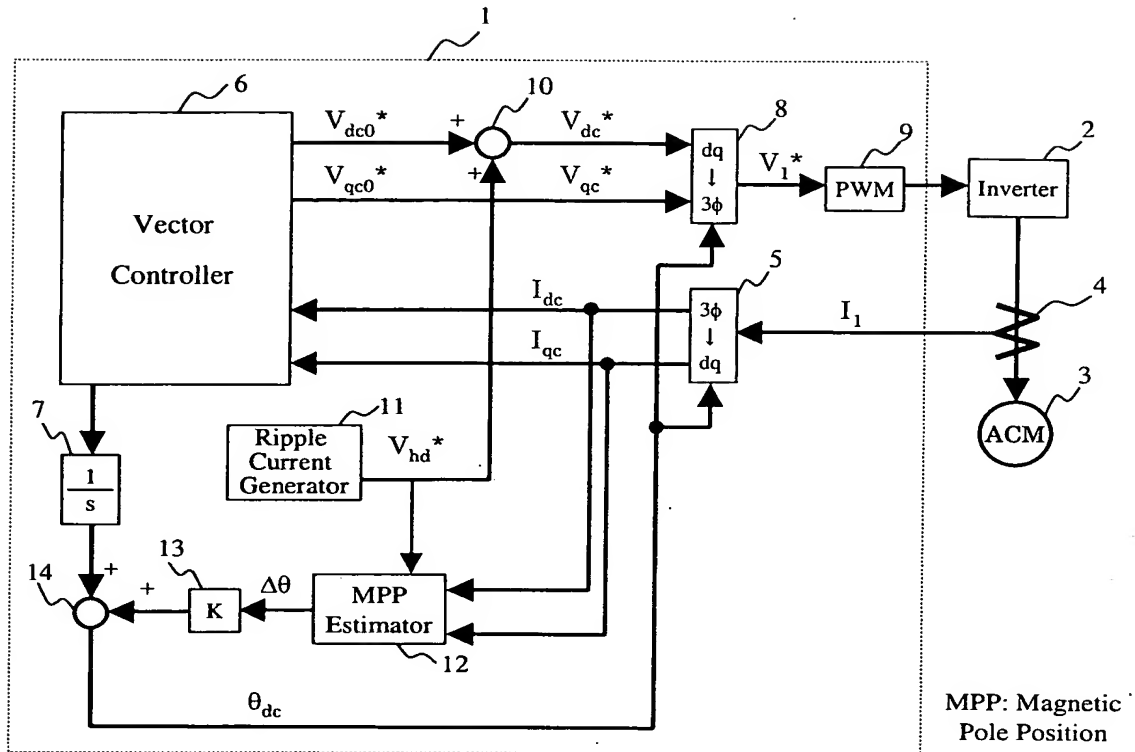
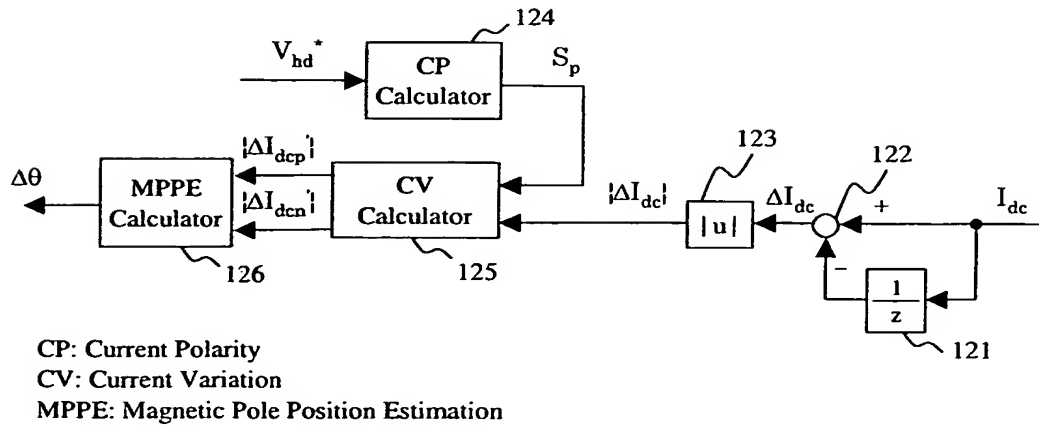


FIG. 2



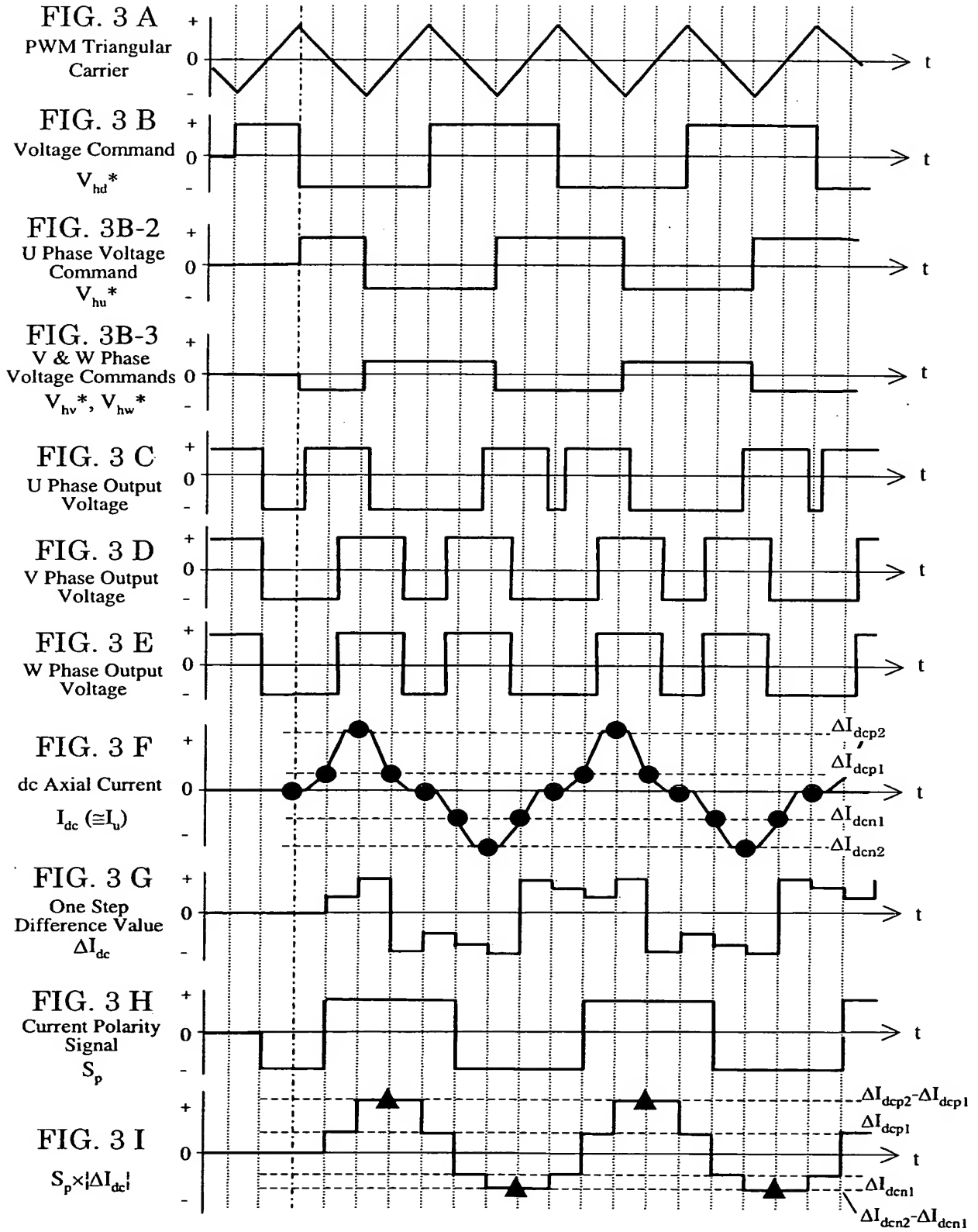


FIG. 4 A

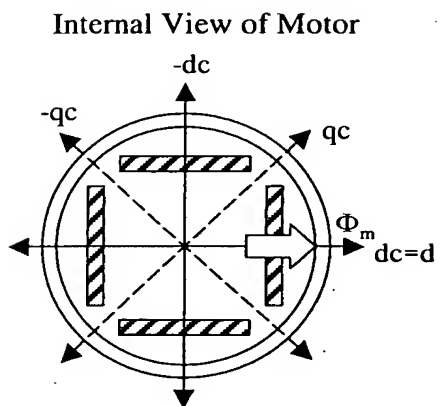


FIG. 4 B

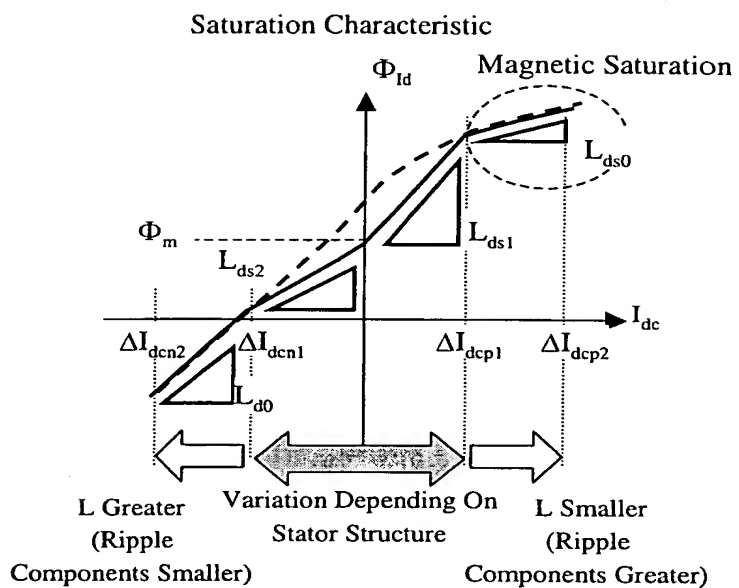
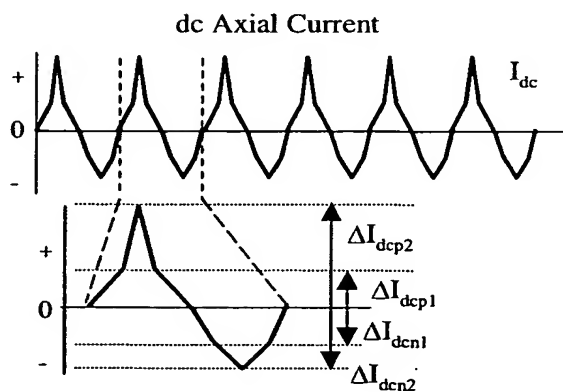
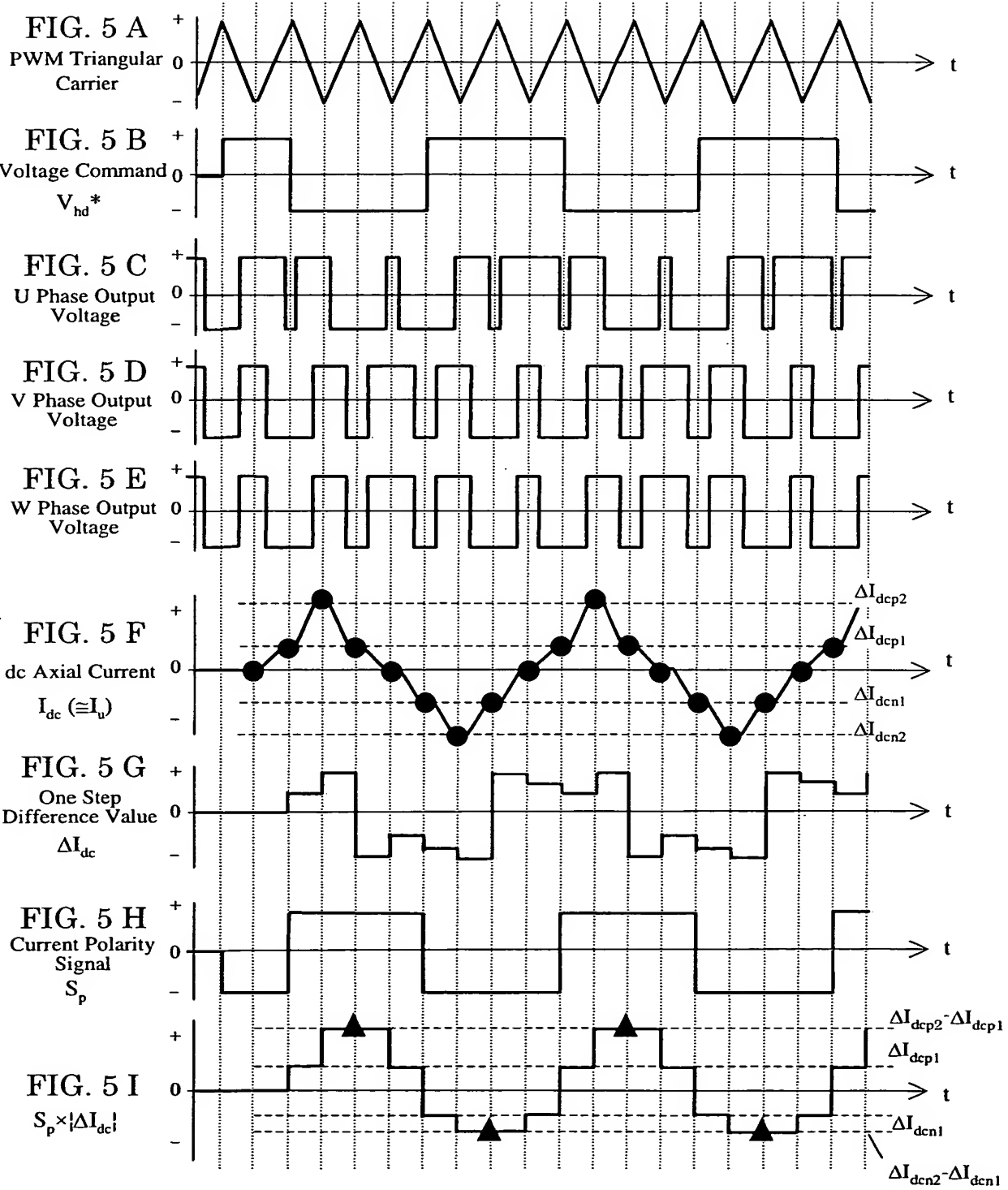
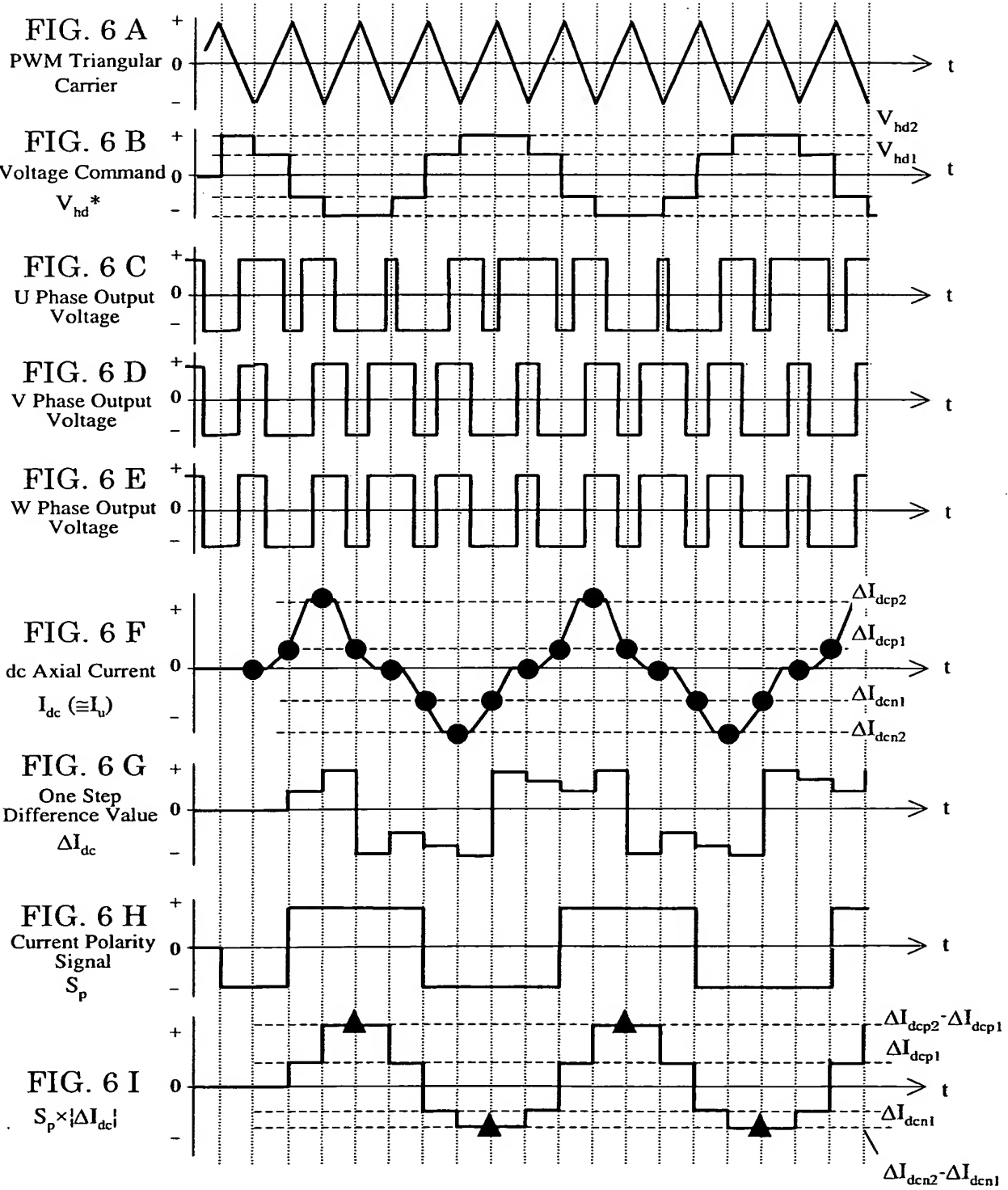


FIG. 4 C







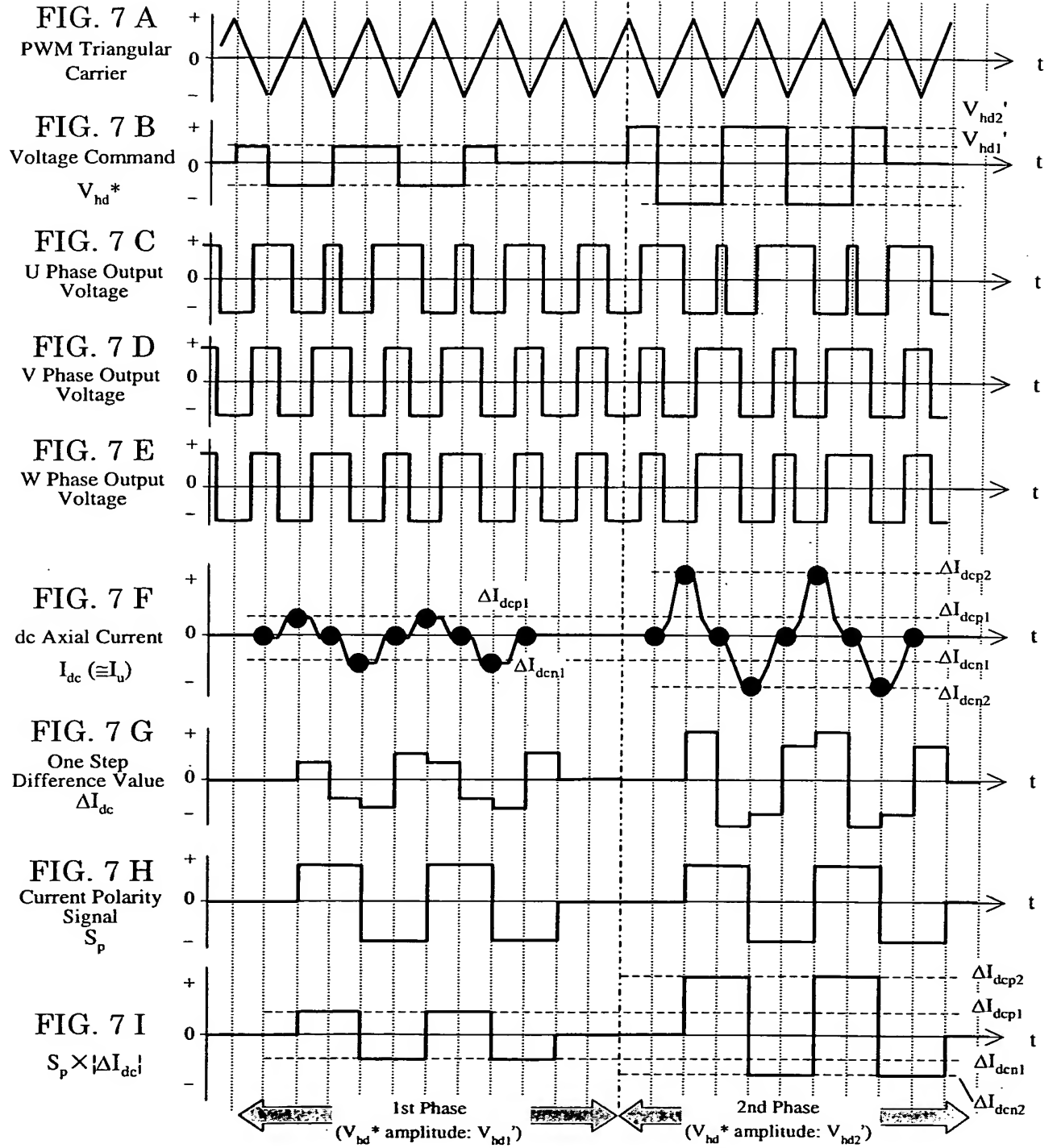


FIG. 8

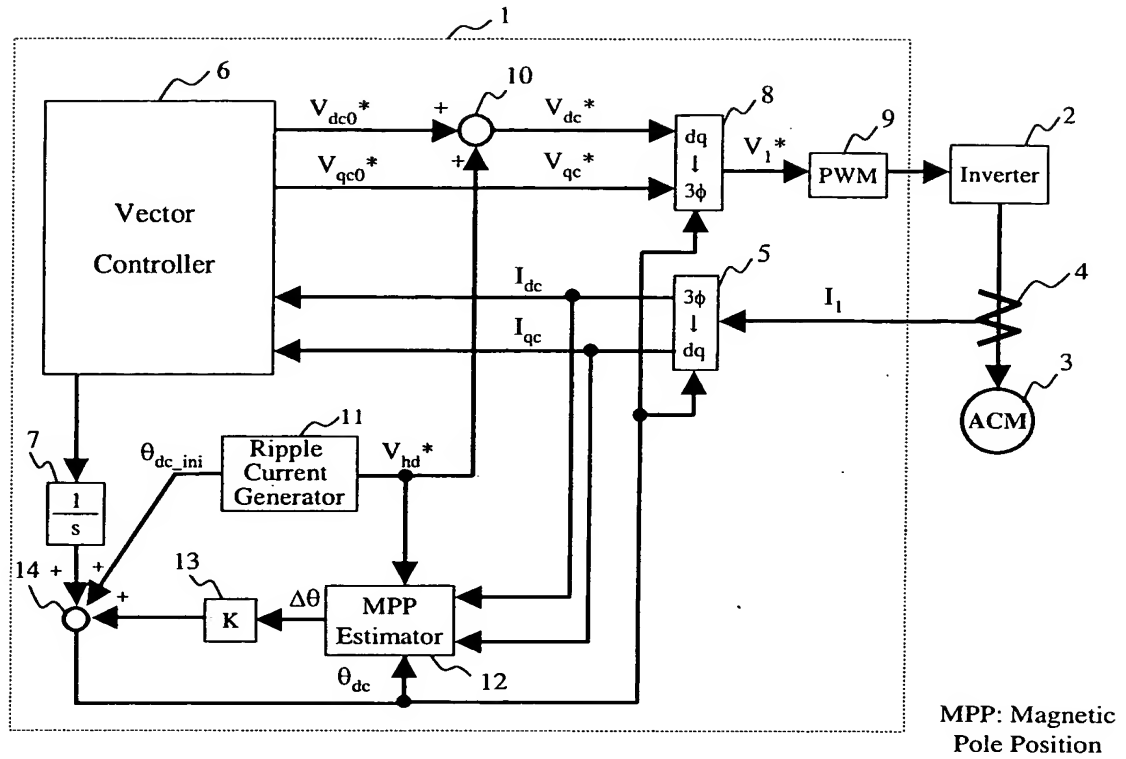
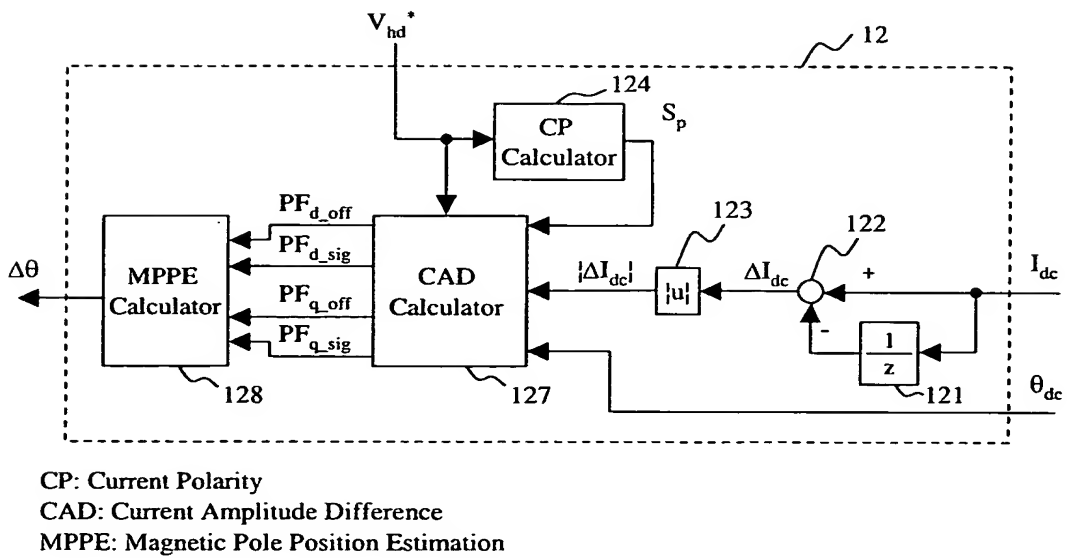


FIG. 9



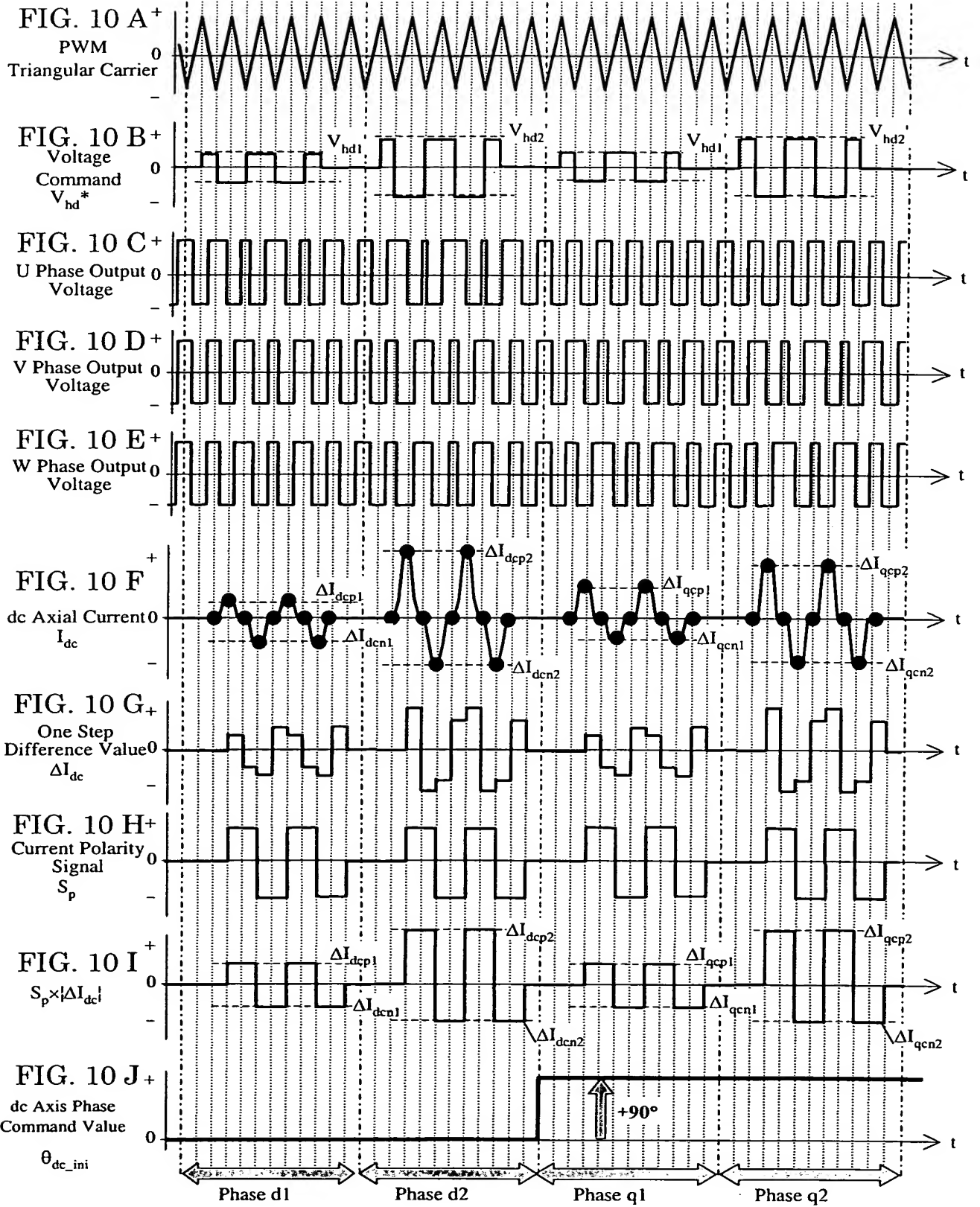
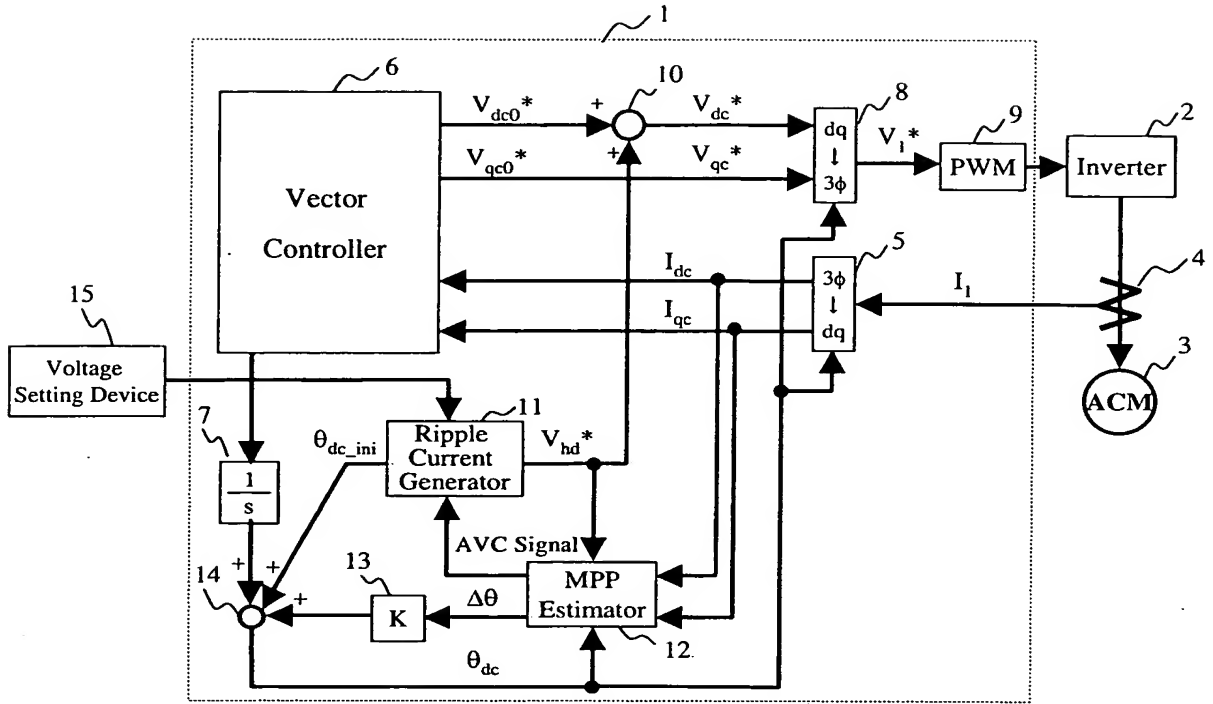


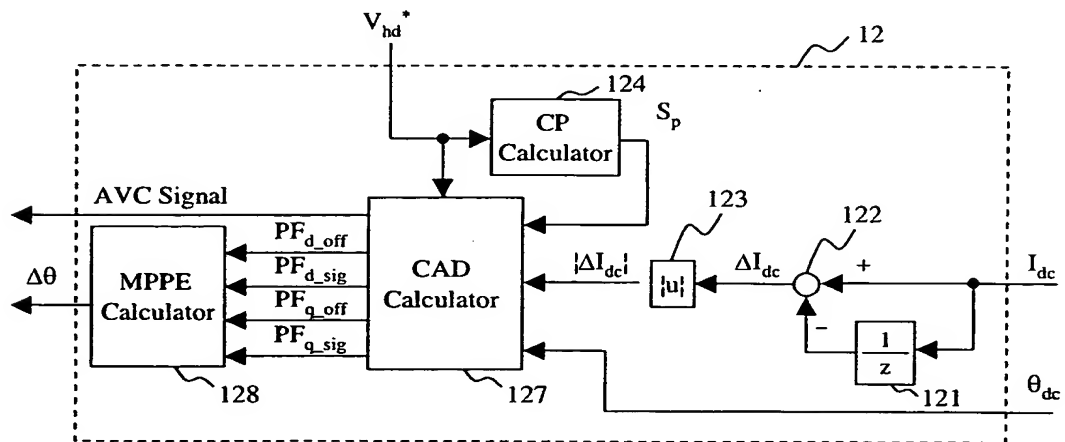


FIG. 11



AVC: Adjustment Voltage Command  
MPP: Magnetic Pole Position

FIG. 12



CP: Current Polarity  
CAD: Current Amplitude Difference  
MPPE: Magnetic Pole Position Estimation  
AVC: Adjustment Voltage Command

FIG. 13

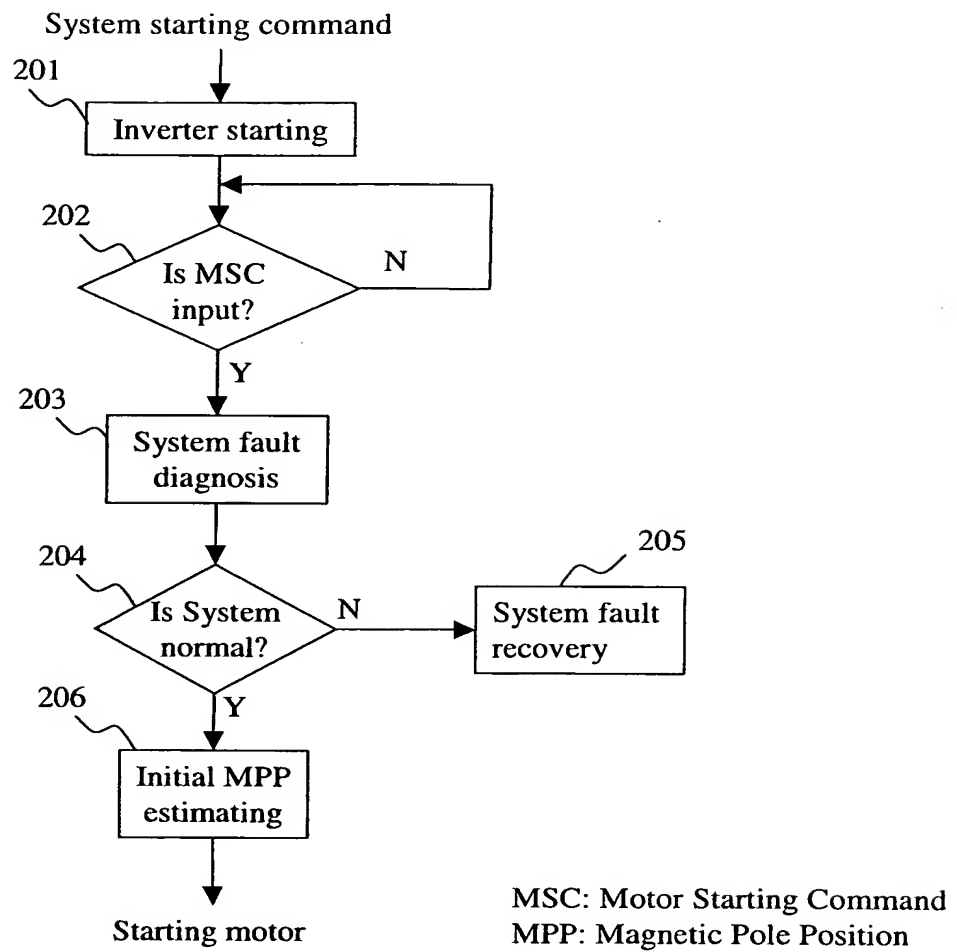


FIG. 14 A

Internal View of Motor

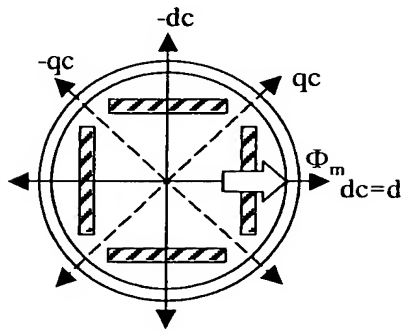


FIG. 14 B

Saturation Characteristic

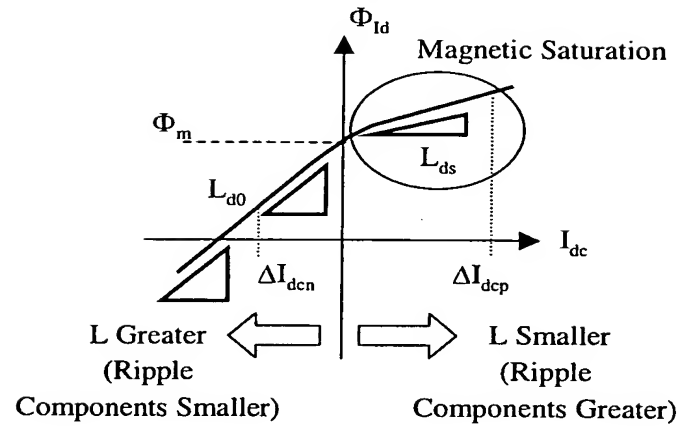


FIG. 14 C

dc Axial Current

